



MAGAZINE

PRICE TWOPENCE

OCTOBER 1953



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FRONT COVER: *Morning in Hong Kong harbour*, by P. R. Sanders (Far East Dept.)

OUR CONTRIBUTORS

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TOM MCNAY works as a joiner in the Powfoot factory of Nobel Division. He has been with the Company for the last twelve years, apart from a break in the war, when he served with the Royal Signals abroad.

A job of work for SAILING BARGES

By Michael Danckwerts



Rowland Shepherd, master of the I.C.I. barge *Revival*

THE sight of a red-sailed barge heeling to a stiff breeze at Gravesend or beating up the east coast was a common one thirty years ago. Then there were more than a thousand of these craft plying the Thames and Britain's coastal waters with cargoes of sand, cement, bricks, stone, hay, fireworks, manure—they carried almost anything.

Now there are only thirty left, and of these eight belong to I.C.I. Old, slow, as outmoded for most jobs as a horse-drawn bus, they are still admirably suited for the work they do for Nobel Division.

Ardeer, Asphodel, Dreadnought, Edith and Hilda, Ethel Ada, Gipping, Millie and Revival are based at Denton Wharf, Gravesend. When a Nobel coasting ship brings a freight of explosives to London for transhipment abroad she is allowed no further up-river than Canvey Island. The sailing barges meet her there and distribute the explosives to ships in the Port of London. The Port of London Authority has stringent regulations about explosives, and the sailing barge—engineless and built of wood, with never a risk of a spark—might have been designed to meet them.

If the ships that will carry the explosives abroad are not ready to load, the barges sail up to Mucking Bight, just below Gravesend. At permanent moorings there lie five floating magazines, dismantled hulks that were once themselves sailing barges. The men in charge of them have what is perhaps the loneliest job in I.C.I.

Each man is alone on a hulk for two weeks at a time. Every night he hangs out the riding light, and every morning he douses it. Every day he checks the magazine and its contents. Three times a week the routine is broken by the arrival of a tug with provisions. For the rest of the time he is alone, often cut off by fog or darkness from sight of the shore or even the other magazines. Usually an old sailing barge man himself, he passes the time by singing a few ditties or reliving the days when the barges were queens of the river.

One I.C.I. sailing barge, the *Orwell*, was sunk in collision some years ago and given up as a total loss. The risk of being run down by a steamer at night is a very real one for sailing barges, and those from Denton Wharf now sail at night only in emergencies. They are not easily sunk, by any means; several of the Thames fleet were



THE THAMES BARGE RACE. *The last of their kind, Thames barges are here rounding the mark off Southend in a light breeze. Owing to the dwindling number of barges, the 1953 race was the last of a series of Thames barge races dating from 1863.*

bombed and machine-gunned in the Channel during the war and emerged battered but still afloat.

When a barge is badly damaged nowadays, or breaks up from sheer old age, she is not replaced; in fact she could not be, for the shipwrights no longer exist who used to fashion oak, elm and pitch-pine into these immensely solid craft. And so the Thames fleet slowly dwindles.

In the spring of this year, when the annual barge sailing match started in 1863 fell due, there were only thirty entries. From Denton Wharf *Revival* and *Dreadnought* were entered for the restricted staysail class, and Skippers Rowland Shepherd and William Spillett acquitted themselves well by coming second and third in the class. It was the last of these races that will ever be held, and old salts who watched the red sails crowding each other at the climax of the race were moved to something like sentiment.

But the great sailing barge tradition, even if it is dying, is not dead. *Gipping* (64 years old), *Revival*, *Dreadnought* and the others (all well up in their fifties) can look forward

to a long life yet: one Maidstone-built barge was broken up in 1928 after working for 139 years. For carrying explosives, and for quite a few other jobs, sailing barges are still unbeatable. For their size—anything from 40 to 70 tons displacement—their crew is small: a skipper and a mate. In a fair breeze they can make ten knots, and in foul weather, even fully loaded and with a bare three inches of freeboard, they concede nothing to powered craft. Their flat bottoms enable them to hug the shore and sail the shallowest waters and to sit comfortably on mudbanks when the occasion demands.

Sailing barge men, too, have a toughness, an individuality and a cock-sparrow wit that will die hard. They tell a good story of a yacht that closely followed a barge over sands in the Thames estuary on what the yachtsman fondly imagined to be a short cut. After a while the barge stopped. The yachtsman called officiously: "Ahoy there, barge! Do you know you're aground?" The barge skipper said dryly: "Yus! And what's more, so are you! I came here to load sand—what've you come for?"



THE I.C.I. BARGE *Dreadnought*, 50 years old, sailing in the Thames barge race this year. She finished third in her class. The I.C.I. barge *Revival* was second.

PENICILLIN PACKER

VEILED to the eyes and wearing peach-coloured nylon trousers, gowns and caps, the girls move silently about the closely guarded room.

Any resemblance between this and the opening sentence of a magazine story about a Turkish harem is purely coincidental, and the reader must sternly rid his mind of any such romantic notions. The penicillin filling room at the Regent Works of Dyestuffs Division is dedicated to the realistic business of getting penicillin salts into glass vials in a perfectly dry and sterile condition. The rather becoming dress of the girls who work there, the white coats and overshoes of visitors who watch them even from outside the room, and a great many other precautions which are not immediately obvious are aimed at excluding a host of potential intruders in the shape of bacteria.

The girls who work in this sterile, air-conditioned filling room can justly boast to their friends in the little town of Linlithgow that theirs is an exclusive job. "Not even the Chairman of I.C.I. could come in here," they told me with some glee, "unless he had 'scrubbed up' first and put on sterile clothes, shoes and a mask." Elizabeth McGregor, who was once a bus conductress and who has never yet been on the receiving end of a dose of penicillin, is perfectly at home in these strange surroundings. As a leading hand in the filling room she has several duties and is responsible for maintaining sterile conditions in the room during the day and for seeing that the filling process goes on smoothly and accurately.

When I first caught sight of her through the inspection window Elizabeth was checking one of the filling machines. There are seven of these, each enclosed in a small booth. Sterile air is blown upwards from underneath the machine, ensuring that chance bacteria will not venture in its immediate vicinity. These streams of sterile air give the atmosphere of the room a slight positive pressure, which removes any possibility of "dirty" air leaking in under the doors.

Checking the accuracy of the filling machines is an important part of Elizabeth's job. If a doctor receives a vial labelled "Avlon" brand Crystalline Penicillin G (Sodium Salt) B.P., 100,000 units," he assumes quite confidently that it contains 100,000 units—no more and no less. Such a large number of units suggests a fair quantity of penicillin; in fact this dose weighs only 0.06 of a gram, which means that it would need 472 vials to give an ounce of penicillin.

Satisfied with the accuracy of the machine, Elizabeth started

on her routine tour of the room with a swab soaked in alcohol. She mopped the filling positions first, then moved down to where four girls were putting sterile rubber bungs in the vials. Although it is unlikely that germs would penetrate the defences so deeply, this extra precaution of sterilising with alcohol is applied frequently to all the working positions in the room.

Once the vials are stoppered they can safely be passed to the non-sterile packing room to be equipped with metal caps and with labels. The girls here, and in the room where the empty vials are sterilised before being filled, all serve in turn in the filling room.

I was able to talk to Elizabeth when she emerged with the other filling room girls for a mid-morning break. The dryness and comparatively high temperature of the room (70° F.) and the need to wear a mask make the conditions of their job unusual—but not, Elizabeth assured me, by any means unpleasant. (When winter comes to West Lothian there are probably few people who would not change places with these girls to work in a constant summer's-day temperature.) When they left the room the girls discarded their masks and nylon clothes in the adjacent changing room. These clothes were now "dirty" and went at once to the factory's own laundry. At the end of the break, newly laundered and sterilised clothes await them.

When the girls arrive at the factory in the morning the procedure is quite elaborate, Elizabeth explained. After leaving their outdoor clothes in lockers and exchanging their shoes for special white slippers the girls move on to the last dressing room, where they wash off all the make-up so carefully put on before coming to work. Then they scrub their hands as surgeons do and don sterile clothes, caps and masks for the day's work.

When the girls leave the sterile room at the end of the day they leave their clothes in the next-door changing room and go to the last dressing room, where they at once set about restoring their morale with powder, cream and lipstick supplied by the Company.

"Here is where we make up," Elizabeth said, showing me into a pastel-green room. It was equipped with fifty mirrors and dressing tables, and it might have been a film star's dressing room. "It seems only fair," said the lady supervisor, "that if we insist on the girls removing all their make-up we should provide them with the means to put it on again."

How the lady supervisor manages to choose a shade of lipstick to please everyone is a question I forgot to ask. M.J.D.



Information Notes

EMULSION PAINTS

By J. N. T. Adcock (Paints Division)

Briefly, the difference between an emulsion and an ordinary paint is that the "carrier" is water rather than the more usual and expensive white spirit; and the film-forming materials are mixed with water by means of an emulsion technique. Hence you get a water paint that lasts, can be scrubbed, and can be put on easily and quickly with a roller. Here is an expert's account of the new paints.

EVERY decade or so the paint industry produces something really new. The 20's saw the birth of cellulose finishes, alkyd resins arrived in the 30's, and although paint in general was inconspicuous during the 40's, the turn of the half century brought with it the most publicised of all—the emulsion paints.

Much has been written about these finishes and, in common with many new developments, some extravagant claims have been made, both in this country and in the U.S.A. Yet emulsion paints have so many attractive properties that they are bound to make a permanent place for themselves among the products available to the decorator.

Primarily they are paints for walls—walls in the home, the school, the factory—brick walls, plaster walls, even walls that have been previously papered. They are put on in the same easy way as distemper, that is with criss-cross, carefree strokes of a large brush, but the resulting coat is much more like an ordinary paint film; it is extremely durable and tough, and can be scrubbed. To thin these paints, water is added instead of the customary turps or white spirit, and consequently they are practically odourless. They can be recoated within a matter of hours, and so it is possible to finish a complete room within a day and occupy it the following day without the usual paint smell.

A good deal of their success has been due to the ease with which an unskilled amateur can apply these finishes and get an almost professional-looking job. "Almost" is used advisedly, because even with this class of paint the work of the skilled craftsman will still be recognisably better, although compared with orthodox finishes the gap is appreciably narrowed. The easy application is particularly noticeable when the roller method of application is used.

Putting on paint by roller is not new, but it was not until emulsion paints were available that rollers became popular.

The complete outfit consists of a shallow tray, deeper at one end than the other, a 6 in. or 8 in. roller, and a small brush for doing the edges and corners. The best type of roller for emulsion paints is one with a covering of lambswool. This gives a slightly stippled effect that most people find rather attractive.

The paint is poured into the deep end of the tray and the roller dipped in the paint, and any excess is removed by rolling it up and down the inclined plane. The paint is then rolled on to the wall, spread out as evenly as possible with strokes in all directions, and then finished off with a series of vertical strokes. The roller is easily cleaned afterwards by washing with warm water containing one of the popular detergents.

Of the various kinds of emulsion paints on the market, some are easier to apply than others, while some have good adhesion to plaster and some are not so good. The Paints Division emulsion paint 'Dulite,' which has now been on the market for twelve months, has had an excellent reception and satisfies the requirements of the professional decorator and the handyman. It has an attractive sheen and comes in a good range of colours, which can be mixed together to obtain almost any desired shade.

Until recently 'Dulite' and 'Dulux,' the Division's alkyd-based gloss finish, have been sold only to decorators, merchants and public authorities. Now these major decorative products are available to the public and can be bought freely through a large number of retail stores. An advertising campaign for 'Dulux,' which began as a local affair in the neighbourhood of the Division's largest factory, featuring the slogan "Say Dulux to your decorator," has now been extended to cover the national press, and the large increase in sales which has already taken place is expected to grow apace as the products become known.

SURPRISES OF RESEARCH

By A. B. M. Whitnall (Chief Entomologist, African Explosives and Chemical Industries)

Research work with all its minute painstaking observation is always something of a lottery in that no one ever knows just where it will lead to. Here is the story of a piece of academic research which ended up as the vital evidence in a case of alleged greyhound switching.

THE research worker frequently tackles a problem which apparently has only academic value. Such value must seem vague and obscure to the untrained observer and appear to have no significance whatsoever. Yet research work of this type often proves of great economic importance and indeed may be of vital significance in our everyday lives. An example of this was brought to light recently when an obscure scientific investigation carried out in 1929-30 was put to vital use in 1944-5—some fifteen years later.

In 1929-30 I was a student at Rhodes University College, Grahamstown, preparing for the degree of Master of Science. My work was guided by the late

Dr. J. E. Duerden, who was then Director of Wool Research in the Union. Part of the requirements for the M.Sc. degree entail the investigation of an original problem, and I was directed to investigate the seasonal variation in the coat of some domestic mammals.

I remember taking samples of hair at monthly intervals from the shoulder, ribs and rump of a horse, a cow and a donkey. The hairs from these samples were carefully studied and graded according to length. Some interesting scientific facts came to light.

It was learned that the horse completely sheds its coat twice during the year, and that the sleek summer coat is distinct from the shaggy winter coat. In the cow and the donkey the coats are not separate, but the short summer coat is an early-growing stage of the long winter coat and shedding takes place once a year.

Details of the investigation were eventually written up and published in the *South African Journal of Science*, Vol. XXVII, pp. 521-45, 1930, and buried deep in the scientific libraries of the world. The investigation served its purpose. I obtained the M.Sc. degree and forgot all about the summer and winter coats of horses, cows and donkeys. More pressing economic problems about tsetse flies, scale insects of citrus, insect pests of turf grasses and arsenic-resistant ticks claimed my attention.



... extracts from literature

One day in January 1946, when I was deeply engrossed in tick problems, I was sitting at my desk pitting my wits against the arsenic-resistant tick when the telephone rang.

"Is that you, Whitnall?"

"Yes."

"This is van der Linde, the G.V.O., speaking. Are your initials A. B. M.?"

"Yes."

"Then you will be interested in the Dyed Greyhound Case."

I explained that I knew nothing about it. Dr. van der Linde then pointed out that there was an interesting article by Hamilton Kirk in the *Veterinary Record* of December 1945, reviewing a legal case in which the coat of a black and white greyhound was alleged to have been dyed so as to make it appear all black. The paper on the seasonal variation in the coat of the horse, the cow and the donkey had been used as vital evidence in this case!

The case was heard in Britain and occupied the attention of a judge and jury, four counsel and a retinue of solicitors for four whole days, during which the prosecution produced thirty-one witnesses. Briefly, the allegation was that the defendants knew in August 1944 (at another trial) that the dog

had been dyed in the previous January, and had committed perjury. The prosecution based its case upon the discovery of a dozen dyed hairs in February and October 1945. The veterinary witness for the defence had to prove that individual hairs which were growing in January 1944 could not still have been found in February or October 1945—twenty-two months later.

Counsel for the defence had been given certain advice

beforehand and argued that it was possible for dogs and cats to grow parti-coloured hairs, although it was not common in a black and white dog. Further arguments were advanced about the influence of diet on hair.

Counsel for the prosecution followed another line of interrogation. The veterinary witness was requested in cross-examination to assume that the hairs had been dyed, and was



... samples of hair

asked the direct question: "Could hairs dyed in January 1944 have been still present in February 1945 and October 1945?" The answer was "Definitely no!"

Great pressure was brought to bear to get this reply shaken or reversed, in view of the fact that some witnesses for the prosecution had stated that no dog would lose *all* its hairs under three years. Apparently that was a mere opinion, unsupported by any kind of proof. Asked why he was so sure that a dog would completely lose its coat at each moulting, the defence expert witness stated that from years of observation of dogs it was obvious how the winter coat, which became shaggy, long and discoloured, gave place gradually to a shorter, glossy coat as summer drew on. He quoted the case of the Arctic fox, which had a bluish-grey coat for summer and an all-white coat for winter. Never was a blue hair found among the white or vice versa.

It was generally accepted among scientific workers that a complete change of coat was a natural phenomenon common to all hairy mammals, and when we knew from colour changes that shedding was complete in foxes and wolves there seemed no reason to expect any departure from normal in other members of the dog tribe. Asked if he could quote any authority in support of such argument, he read extracts from

literature obtained from the Royal Zoological Society's library. The witness then quoted from the paper which had appeared in the *South African Journal of Science*, and ended up his quotation with the words "The shedding of the outer covering of the body is a general phenomenon among animals and is particularly manifest in mammals. Sometimes it admits of the replacement of an old and worn covering by a fresh and perfect one, often different in form and colour. The process in the three types studied may be regarded as characteristic of hairy animals in which fibres are all of one type. It is obvious from the fibre analysis that the long winter fibres are completely shed at the beginning of summer. No marked shedding period occurs in human beings; also in dogs and cats no distinct shedding takes place, but single fibres are continually dropping out and new ones emerging."

Other authorities were also quoted, but not at such length. The prosecution brought forward thirty-one witnesses, but the result was an acquittal of the accused.

The case aroused great interest not only among members of the veterinary profession but among the thousands of ordinary people who attend greyhound racing tracks. Scientific evidence in the form of purely academic research work had won the day against the opinions of thirty-one witnesses.

KYNOCH PRESS HAS 75th BIRTHDAY

By J. Kennedy (Manager, The Kynoch Press)

Seventy-five years ago The Kynoch Press consisted of one small power machine and one hand press housed over a stable beside the railway line at Witton. Today it employs 275 people with the most modern machinery and has won an enviable reputation for good printing. Here is the story of how the Press has grown from humble beginnings.

THE Kynoch Press started—in very humble and unpretentious circumstances—in 1878. This year therefore brings its seventy-fifth anniversary.

So humble were its beginnings that during the first years of its existence no record was kept of where it was located or of the people employed. The plant consisted of one small machine worked by power and a press worked by hand. It is known that, by 1896, the Press was housed over a stable beside the railway line at Witton, employed five men, a woman and a boy, and had four power-operated platen presses.

The original work of the Press was to print the cases of sporting cartridges and the brown paper wrappers of military ammunition. But in 1898 the new Kynoch soap and candle works asked the Press to print their wrappers and advertisements. This led to an increase in the staff to ten and a move to new premises.

It was in 1903 that the first manager of the Press was appointed and the first work for customers outside the Company undertaken. Many of the hackneyed types were cleared

out and replaced by others selected for their good design and suitability for the new class of work being done. Gradually a larger proportion of good-quality printing was handled. Right up to the outbreak of war in 1914 this trend continued, and many of the Press's catalogues and other items of commercial printing turned out were examples of good printing which would bear comparison with any.

In 1918 the merger of Explosives Trades brought with it a lot more work and this was very considerably added to in 1921, when Nobel Industries Ltd. was formed. It was at about this time that the Press moved into the premises which it still occupies, and the Monotype typesetting machine and many other items of up-to-date equipment were installed.

The character of the Press changed also, and from being a rather insignificant adjunct of the ammunition factory it became a real printing office with a distinct function to fulfil and an existence in its own right. From this time, too, very great progress was made in the development of the Press. Standards of quality were raised and an increasing quantity of external



The machine room of The Kynoch Press, showing some of the thirty-five letterpress and lithographic machines now in use

work taken on. Already the Press was achieving something of a reputation for good printing and was entrusted with important work, including a number of limited *éditions de luxe* of the English classics for the Nonesuch Press.

Then with the formation of Imperial Chemical Industries there was another very great extension of work, which led to a fairly extensive enlargement and the installation of modern plant in 1931.

The Press now employs approximately 275 people. Even with the best equipment, in a highly skilled trade like printing it is mainly on the qualities and abilities of its workpeople that success depends. Fortunately The Kynoch Press has always been successful in getting good and enthusiastic craftsmen.

The work falls into three classes. First, though it forms less than a fifth of the total turnover, there is that done for the Metals Division—stationery, printed cartons and labels for ammunition, and all the general printing of a large manufacturing organisation.

Secondly, there is the work for the rest of I.C.I. This has to be secured in competition with other printers, though with much of it, particularly printed publicity, the competition is in quality and service rather than in cost alone. The inter-Company work falls into two parts: that placed by Central Publicity Department, which includes *Endeavour*, the *Magazine*, and a great volume of technical books, booklets and brochures in various languages; and that which comes through Central Purchasing Department and the Supply Departments of Divisions. The latter consists mostly of stationery, but includes some internal book and technical printing.

Thirdly, there is the work for external customers, which consists almost entirely of high-class book and publicity printing, much of it in foreign languages or of a scientific character.

This outside work which The Kynoch Press takes on enables the various sections of the plant to be kept in continuous use. A printing plant is very highly specialised, and for this reason it is necessary to have a balanced quantity of work in hand, so that one particular section is not idle when another is working at full pressure.

The demand for various types of printing is often seasonal; for instance, the volume of illustrated publicity work going through the Press shortly before the British Industries Fair each year is enormous but may drop very low indeed during the following summer months. To cope adequately with a fair proportion of I.C.I.'s peak requirements the Press must for much of the year have surplus capacity for each class of work, and to use the capacity economically it keeps it occupied at other times with work for outside customers.

Today, on advertising booklet and brochure work The Kynoch Press competes on equal terms so far as cost goes—in fact such work is placed more on design and service, in which the Press has few equals. In all some twenty or thirty well-known firms compete as specialists in this class of work. On stationery there are many more competitors, and though the Press can produce many items economically, there are other firms who are able to undertake some more cheaply. On four-colour printing there are only five or six firms in the United Kingdom who can do work of comparable quality.



The bee-house, 12 ft. long by 9 ft. wide

My Bee-house

By Tom McNay (Nobel Division)

Here is an unusual method of keeping bees—ten colonies in one house, each colony with its own entrance. And the advantages? Less damp, more warmth, and the opportunity of examining and feeding the bees during a hard winter.

WHEN at last the children of Israel came to Canaan, they found "a land flowing with milk and honey." The phrase tells every bee-keeper that Canaan was rich in pasture and woodlands.

None of the bees would be "kept" in the modern sense. Men would hunt for stores of honey in hollow trees and other likely cavities where swarms of wild bees might hive. The bees would be smoked out and the hives robbed of all their contents. Wild animals, which also like honey, competed to find these hidden stores.

Nowadays, although bees are kept and owned, the insect does not differ much from the wild bee. The "domesticated" bee has not been tamed, had its instincts changed or been robbed of its stinging habits. All the bee-keeper

does is to manipulate the hive to his own and the bee's advantage.

I was twenty-four when I first started to keep bees. I am a countryman and a joiner by trade. Thus I had my interest in bees sharpened because one of my uncles was a bee-keeper; my joinery made the beginning cheaper because I made a lot of the equipment myself. For many years I used the hive system which is common throughout Britain.

From experience gained I designed and built my present bee-house which has interested other bee-keepers in Scotland.

The method is not novel but it is unusual in Britain. I am convinced it has many advantages over the



Interior of the bee-house, showing the colonies of bees on the right and storage space on the left

conventional system. Briefly my bee-house is a substantial garden hut which houses ten colonies of bees under one roof and in which I have space to work freely and store equipment.

The bee-house, raised above ground level, is plank floored. It is 12 feet long by 9 feet wide. The height from floor to eaves is 7 feet 6 inches and the height to the apex of the ridged roof is 11 feet. The house is strongly built of wood, with a metal-framed easily opened window at one end. At the other end is the entry door. Indeed, at first glance it looks exactly like a strong garden hut. It is dry, and free from draughts, when window and door are closed.

Closer examination will show the visitor that it is not just a garden hut.

Midway along one wall inside runs a broad shelf and, immediately beneath, the floor is raised about two inches to form a step equal in area to the shelf. On the ground step are five bee-hives and on the shelf above are the elements of five others. Thus along one side of the hut I can accommodate ten colonies of bees, each completely separate.

Outside the hut above ground level a narrow horizontal board runs along the length of the same wall and midway up the wall another board parallel to the first and the ground is fixed.

These are the landing boards. Each board is separated with small wooden partitions into five parts. The surface is painted with a dull colour and before the paint has dried coarse sand is lightly sprinkled over it. Thus when heavily laden bees touch down in a wind their foothold is secure.

Each part of the board is a bee-entrance to the interior hive elements with which they are connected by the usual slits. Bees do not mistake the entrances. They know the way to their own hive as certainly as a man finds the right gate in a housing estate. Misadventures are rare.

The slit is a submerged entry to the hive elements within. Thus when the bees enter from the landing board they must come upwards through the brood chamber in which the queen is confined by a grid whose meshes allow passage of worker bees to upper tiers of the hive but are too small to let the queen through.

If honey is needed in the brood chamber the worker bees provide it, and when that task is done they pass upwards through the chamber and make honey in the upper frames.

Life within each unit of my bee-house is exactly similar to life in a conventional bee-hive.

For the bee-keeper, however, working is very different. Examination of hives in the open cannot be done well or quickly in wet weather. In the bee-house neither rain nor wind matters. If I suspect that something has gone wrong in one unit I can lift off the top immediately and inspect. Whatever routine manipulation I want to do with the queen is much simpler than in an outdoor hive.

When the noise in a colony hints that swarming may be threatening, I can act instantly, hunt for the rival queen and remove her or the old queen. Bees swarm when they are overcrowded or when a young queen is on the point of emerging from a royal cell. If the process is not controlled possibly half the population of a colony will



The author examining his bees inside the bee-house

Perhaps the greatest advantage of the bee-house comes in winter, because during a season which is always critical in the life of the bee, routine examination can be done without endangering the stock. If honey reserves are found to be low, emergency feeding can be applied and controlled and the bees saved. In an outdoor hive, tied down and insulated for winter, examination can only take place in unusually warm and unwintry weather. In the average year when such a day comes the bees are often found to be too weak for aid by emergency feeding. Thus bee-house colonies winter more easily because work can be done in them which is impossible in the outdoor hive.

In summer and autumn, during the honey season, manipulation is also simpler. Honey can be removed, tiers added or taken away at will in any weather.

There are advantages for bees as well as their keepers. Bees are badly affected by damp. The bee-house is less damp than a bee-hive in the open. In winter the bee-house is also warmer and the air circulation is better. Such facts alone would make the bee-house system preferable to the other. That is my opinion based

on four years' experience.

Practical results from my bee-house have been satisfactory. From my ten colonies I believe I have had a greater yield of honey than would have come from ten conventional hives. In a good year each colony has given from 140 to 160 pounds of honey. Thirty to forty pounds of honey were left in each unit for winter feeding, so the surplus, allowing for some losses, would be between 900 and 1000 pounds weight. My family likes honey but cannot eat all that quantity so there was some profit from sales.

The fact that I am a joiner was a help, because I built the house myself. Wood cost me £30 to £40, but to buy such a house would cost three times as much or more. With stocks of bees, elements of hive interiors, equipment and bee-house the capital value of my outfit will be around £250.

There may be many bee-houses in Britain, although I know of only one other. In Scandinavia, however, I believe the bee-house system is popular. Perhaps its advantages are more appreciated in lands of short brilliant summers and severe winters.

swarm with the old queen and leave the hive. Ten or fifteen thousand bees may go with the old queen, leaving about the same number in the hive with the virgin queen. If, as is possible, the old queen should die, the bees with her will themselves die out simply because they can no longer replace their numbers.

It is always much better to manage bees than to lose them by swarming, and the bee-house makes such management much easier.

Unfortunately the bee-house does not remove the occupational risk of all bee-keeping. I am stung just as often as any other apiarist. One fact I can vouch for; the man who is afraid of bees and does not handle them confidently and gently is stung more often.

In some kinds of weather even the most experienced bee-keeper knows he will have trouble no matter how he goes about the job. There are days when he might be handling flies, and other days when the occupants of a hornet's nest could scarcely be more aggressive. I am not badly affected by bee-stings. If I was I would have stopped bee-keeping, like many another man, long ago.

ANGELS—AND OTHERS

By Douglas M. Hind (Alkali Division)

For living beauty concentrated in a small space it is hard to beat an aquarium of tropical fish. Here is an enthusiast's account of this absorbing hobby, with valuable advice on points to go for and pitfalls to avoid.

Photographs by Ivor Ashmore

TO man in a lazy mood, aquarium fish may seem to have achieved an ideal state. Their food appears regularly and the temperature of the home is kept at a pleasant level around 75° F. Enemies in the form of bullying fish or parasites are excluded. Their surroundings are kept clean and bright, and even a display of matrimonial desires can be satisfied.

They are called tropical fish for want of a better name, although they do not all come from the tropical or even subtropical zones.

The Guppy is the beginner's fish. The male is about $\frac{3}{4}$ in. long and is very active. His body colour is olive-green with orange, black and white spots shot with iridescent blues and greens. No two fish are alike, and this dissimilarity even applies to the shapes of fins and tail. The female is larger and is of a dull colour.

These fish are most prolific and so easy to breed that one either becomes tired of them or becomes an enthusiast, carrying out line breeding to produce bigger and better Guppies. They are bred as live food for some rare fish which will eat nothing but live fish—the Sea Horse is one—and in the tropics are liberated in ditches and such places as a means of destroying mosquitoes, whose larvae they readily eat.

Guppies are viviparous and bear live young which are tiny free-swimming fish about $\frac{1}{8}$ in. long and almost invisible except for their eyes. They are far from helpless and make for shelter as soon as they are born—a very necessary precaution, since even their parents are liable to eat them. It is astonishing to me that there can exist in such tiny living things a system of nerve cells or brain which can make them seek shelter as they do. Call it instinct, intelligence or conditioned reflex, as you will, it gives reason for serious thought that such a tiny thing can

be so highly developed as to act in a seemingly rational manner.

Presumably to save room, the baby Guppy fish are born with their air bladders collapsed. All fish have this organ and adjust their density by filling it or emptying it as needed, and the baby fish, with an empty buoyancy tank, has great difficulty in swimming. At an early stage he knows that he must swim to the surface and get air to fill this bladder. A vertical swim of 9 in. with no effective air bladder is a long way and a dangerous one to a fish so small, but if he fails to make it the air bladder never develops and the fish, although he may exist for some time near the bottom, never develops properly.

Breeding tanks for live-bearers are therefore about 6 in. deep. Such live-bearers have up to about fifty young at a time. Broadcast egg-layers like the cod may lay a million eggs, and this is an example of Nature's laws of compensation whereby well-developed young tend to be few in number whereas unfertilised eggs are produced in large numbers if the survival of even a few is to be reasonably expected.

Other live-bearers are the sharks and among common aquarium fish the Platy and Swordtail. The Platy is gold-fish shaped and varies in colour from metallic blue-black to almost white. The Swordtail is normally reddish gold or grey-green and the male fish has a long sword-shaped projection on the lower lobe of his tail.

A very common aquarium fish of quite a different type is the Angel Fish, whose body is a flattened disc with long fins. It is a silvery-grey fish with black bars which vary in intensity with the fish's emotional state. Frightened fish of most kinds are likely to lose their colours temporarily, so that newly purchased fish are often disappointing when liberated in one's own aquarium, but the Angel Fish shows this



ANGEL FISH—common and very popular. The black bars vary in intensity with the fish's emotions. When frightened and nervous these fish lose their bright colours temporarily.

peculiarity in a marked way with the slightest of reasons.

Another common fish is the Zebra, which is aptly named although its stripes are horizontal and are really blue and yellow. This is one of the carp family and is very active. They look best in a shoal and are very popular in purely decorative aquaria. A near relative of the same shape and habits is the Pearl Danio, a pink mother-of-pearl fish with golden spots.

There are a number of species of fish midway in shape between the Zebra and the Angel Fish. They number among them some very attractive fish: *Pristella*, a silver fish with black, white and yellow fins and a pink tail; *Serpae*, which is brick red with black and white fin markings; the Flame Fish, silver with red; and the Black Widow, which is silver and black and looks like the widow in the poster "Keep Death Off the Roads." The black markings on this fish grow pale as it matures, and it ends by looking something like an Angel Fish.

The most brilliant marking is probably the blue-green line on the sides of the Neon-Tetra. This line contrasts with a red patch towards the tail to give a brilliant effect. The blue line appears to be luminous but is in fact not so, since it disappears in darkness. The red patch is due to a pigment and will leave a mark if a damp dead fish is laid on paper.

The above are a few of the fish commonly seen and, although all are just fish, they differ so widely in appearance and habit that keeping them is much more like keeping a miniature zoo than keeping one type of animal usually is. All of those mentioned will live happily together, although an occasional rogue of any type may develop a habit of bullying another fish. They are mostly omnivorous and are easily fed on proprietary brands of food, mostly consisting of dried fish, ground shrimps, egg yolk, biscuit and cereals. All are the better for changes of diet and like scrapings from raw meat, chopped earthworms, woodlice and live water fleas, such as daphnia.

Water Flea Diet

If live food is regularly given, the fish will thrive better, and, in fact, breeding fish and fish fry must have live food to grow properly. When live daphnia are fed to the fish they will seldom bully new and usually expensive fish introduced into the community tank. The fish are fed once or twice a day, the amount of food being smaller than one would imagine would be needed. Most troubles come from over-feeding, so that it is preferable to leave fish unfed if one goes away for the weekend or even a week, rather than to entrust it to someone without experience. Fish can do without food for long periods but soon develop diseases if uneaten food is left to rot in the tank.

The feeding habits of fish can be of interest to an angler and a study of them may show why that big one got away.

One of the first things noticed is that they seldom bite but suck food into their mouths. Some take food floating at the surface and others prefer food to be sinking in mid water. They avoid food which sinks quickly or remains suspended below the surface, although they eat live daphnia which are darting in all directions.

Few will pick food off the bottom until all the sinking food has gone, and some which will not eat floating food make it sink by a dash to the surface followed by a quick turn which breaks the surface tension and causes the food to sink, a process which shows how easily a trout can be foul hooked when it attempts this on a dry fly attached to a cast.

Another interesting method of feeding, best observed with chopped worms, is the sucking in of pieces of food, much too large to be swallowed, which are then carried to a quiet spot and ejected, being torn by the fish's teeth in the process. The small parts are quickly eaten and the large portion, if not meanwhile picked up by another fish, is mouthed again and the process is repeated. This may continue for quite thirty minutes if the fish fails to find a quiet spot for his meal, and watching it gives one some idea of the trials of the worm angler.

Importance of Oxygen

In addition to food, fish require oxygen. For many years people have written about "balanced aquaria," in which the numbers, sizes and types of the fish which absorb oxygen and give out carbon dioxide are balanced by the numbers, sizes and types of plants which absorb carbon dioxide and give out oxygen under the action of light. I do not doubt that it is possible, but it is unnecessary and the effect is poor.

If sufficient plants and sunlight are available for the plants to play their part, the rate of algal growth will necessitate very frequent cleaning and the aquarium will have to be a mass of vegetation with few fish, since the fish is a more efficient producer of carbon dioxide than the plant is a consumer of it. At night the plants unfortunately reverse their process and produce carbon dioxide, so presumably it is only the quiescent state of the fish which allows them to survive.

I, personally, think it all too much trouble and rely on the surface of the water to permit the necessary interchange, and if one allows one tropical fish $1\frac{1}{2}$ to $2\frac{1}{2}$ in. long per 3 square inches of surface one cannot go far wrong, whether many or few plants are present. I look upon the plants as a decorative feature which provide some shelter for the fish and also some food for omnivorous species, but I discount them as oxygen producers.

Although the surface area is very important there must be some reasonable relationship between all the dimensions. The depth should be about 12 in. in tanks up to



NEON TETRA—the most brilliantly marked fish of all. The blue lines appear to be luminous but in fact are not so. The red patch is due to a pigment, which leaves a mark if a damp fish is laid on paper.

2 ft. long increasing to 15 or 18 in. in larger sizes and the breadth from front to back should preferably be a little less than the depth. The most popular size is 2 ft. long by 1 ft. broad by 1 ft. or 15 in. deep. Deep narrow tanks are liable to have too wide a variation in temperature from surface to bottom, and shallow wide tanks distort the view and allow the fish to keep too much out of sight.

The gravel on the floor of the aquarium is ordinary washed gravel with some charcoal added to keep it sweet in the same way as for gravel used for bulb growing and it acts simply as an anchorage for the plants and a trap for small particles of animal matter which will be absorbed by

the plants. The water is tap water preferably from the hot tap, since the domestic boiler will have got rid of any chlorine which the water board may have added and also some of the temporary hardness.

I live in an area of soft water and have no trouble from hardness but I believe that in hard water areas rain water from a clean roof is preferable to tap water.

The air which bubbles up through the water comes from a small air pump and performs the triple function of aerating the water to allow it to dissolve more oxygen, circulating it so that the surface water is changed, and keeping all the water in movement to prevent too great a



SERPÆ—a fish notable for its brick-red colouring and black and white fin markings

difference in temperature from top to bottom. It is a refinement and allows more fish to be kept in a tank than would otherwise be possible, but it is desirable in large tanks where large differences in temperature may occur and essential in sea water aquaria, where the amount of dissolved oxygen in the water is reduced.

The thermostat and heater are very important and should be of the best type one can afford. They each cost about the same as two or three good fish would, and since a failure of either may cause you to lose several fish, economy in this direction can be very false. As an electrical engineer I would add that, if you do not completely understand or disbelieve in the danger of electricity at domestic voltages in conjunction with water, get an expert to connect up the heater, thermostat and light, and remember that even if you are one of those who think that 230 volts is harmless to you—which it is not—the fish have strong objections to

small leakages of current. Moreover the aquarium should be disconnected while cleaning is in progress, and although I should know what would be safe or unsafe to do with the power on, I always have it switched off.

For the seriously minded in search of an outlet for their activities it should be mentioned that the zoology and biology of some common aquarium fish are not completely known and there is much room for careful research in this field.

Many aquarium fish cannot be bred, since their breeding habits are unknown (in fact, often the sexes cannot be distinguished except by dissection) and the discovery of a reproducible set of conditions under which they will spawn could be of commercial value. There is also room for research into the effect of variation in the pH value of the water and the diurnal changes in temperature, light and pH on the habits of the fish.



(Photograph by The Kynoch Press Studio)

MICHAEL CLAPHAM

MICHAEL CLAPHAM was appointed Joint Managing Director, Metals Division, in October 1952, seven years after he had made I.C.I. history by becoming the youngest director ever to be appointed to a Division board. He was 33 years old at the time when he was appointed Personnel Director, Metals Division, in 1945. For an intervening year, from October 1951, he was Midland Regional Manager.

Michael Clapham looks what he is, an intellectual; but he is also quite a lot of things that he does not look—for example, a Marx Brothers fan, a swift and enthusiastic downer of pints of beer, an apple-grower, and something of an amateur cook.

The son of Professor Sir John Clapham, of King's College, Cambridge, and himself a King's man with a Classical degree, he took an early interest in printing, which led him through an

apprenticeship at the Cambridge University Press and an overseer's post at Messrs. Lund Humphries to The Kynoch Press.

After an interlude, which speaks volumes for his versatility, as producer of diffusion barriers for the early atomic energy experiments, he came to his present role in I.C.I.

With an apparent power to take a stimulating part in any discussion on any subject, however specialised, and with a pointed wit, a fine memory and a rare capacity to establish friendly relations with those about him, it is not surprising that Michael Clapham easily wins and holds respect. His manner perhaps tends to minimise his physical stamina, which fortunately for him (and for I.C.I. too) is satisfactorily robust, for he is not the type to spare himself and is a very hard worker.

I.C.I. NEWS

THE BRITISH ASSOCIATION AT LIVERPOOL

THE annual meeting of the British Association for the Advancement of Science—the 115th since its foundation in 1831—was held at Liverpool from 2nd to 9th September. During the week of the meeting some 320 leading scientists gave a summary, to an audience totalling over three thousand, of recent developments in all the principal fields of science.

As in former years, I.C.I. took its due part in this important scientific event. Two members of the Company and two scientists holding I.C.I. research fellowships were among those invited to give papers. Dr. J. Ferguson, of General Chemicals Division, gave a general and historical survey of the heavy chemical industry of Merseyside. Dr. F. L. Rose, of Dyestuffs Division, spoke on chemotherapy, with particular reference to the contribution of organic chemistry in the search for new antibiotics. Dr. W. H. Evans, a physicist holding an I.C.I. Research Fellowship at Liverpool University, gave a paper on some of the apparatus for the detection of radiation being used with the great 13 ft. synchro-cyclotron in the Department of Physics at Liverpool. Dr. K. F. Chackett, I.C.I. Research Fellow in the Department of Physics at Birmingham University, spoke to the Chemistry Section on the artificial transmutation of elements.

Another feature of the meeting was the awarding of *Endeavour* prizes for scientific essays, given to competitors not over 25 years of age. The prizes were awarded by Sir Edward Appleton, president of the Association, at the end of his junior presidential address in the Philharmonic Hall.

First prize of 50 guineas was awarded to Mr. J. R. Shakeshaft (23) for an essay on radio-astronomy; he is a research student at the Cavendish Laboratory, Cambridge. Second prize of 25 guineas was awarded to Mr. I. H. Gould (24), a student of electronic engineering, for an essay on scientific contributions to medicine. Mr. Abdul R. Zafar (23) won the third prize of 15 guineas for an essay on biology in world affairs. Mr. Zafar is a research fellow at Osmania University, India.

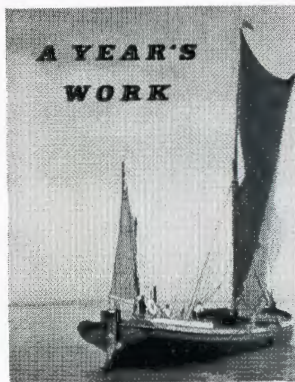
In the junior section, for competitors under 18 years of age, prizes of five guineas each were awarded to G. Steward (17), of University College School, Hampstead, for an essay on power and civilisation, and Miss M. Green (17), of Bedlington Grammar School, for an essay on biology in world affairs.

In addition the editors of *Endeavour* gave a special prize of five guineas to P. C. H. Newbold, of King William's College, Isle of Man, who sent in an essay, on scientific contributions to medicine, of exceptional merit for a boy of only 14.



Left: Sir Edward Appleton, president of the British Association, with the *Endeavour* essay prizewinners. They are (left to right): Mr. I. H. Gould, Miss M. Green, Mr. J. R. Shakeshaft, Mr. G. Steward and Mr. P. C. H. Newbold. Right: Mr. Shakeshaft receives the first prize from Sir Edward.

I.C.I. ANNUAL REPORT



Every employee of I.C.I. should by now have received through the post a copy of the illustrated and simplified version of last year's annual report, entitled *A Year's Work*.

Anyone who has not received his copy should apply to his Division Staff or Labour Department, or—in the case of Head Office employees—the Head Office and Regions Staff Department.

HEAD OFFICE

Mr. A. Hadden

Mr. Alexander Hadden, managing director of Imperial Chemicals Insurance Ltd., died on 7th August after a long illness.

Mr. A. J. Quig, a deputy chairman of I.C.I., writes:

I was in Montreal when the news of the death of Alex Hadden reached me, and although it was not entirely unexpected, as I had been aware of the gravity of his last illness, it nevertheless came as a blow, if not a surprise.

It is exactly forty years this year since he walked into the office of Nobels Explosives Co., West George Street, Glasgow, to take charge of the Insurance Department. He was succeeding a very old friend of mine, Bob Douglas (a cousin of Lord McGowan), who had decided to seek his fortune in Canada with the Hudson's Bay Company, Winnipeg.

Everyone on the staff took to Alex straight away. His pawky sense of humour was very early in evidence, and he became one of the family within the first month of taking up his new duties.

His outstanding achievement for the Company was to press the management of Nobels to convert the Insurance Department into an insurance company, which under his guidance became one of our highly successful ventures. Soon after the I.C.I. merger took place Nobel Insurance Ltd. extended its activities to embrace all I.C.I. insurance matters, and thus at a comparatively early age Alex took on this considerable responsibility. In the course of his duties he travelled to many parts of the world, gaining a wide knowledge of the Company and the liking and respect of countless I.C.I. people. During the war he was responsible for the insurance of the Company's assets under the war damage scheme, and he was chairman of I.C.I.'s War Damage Advisory Committee.

Alex was born for insurance. He had an unerring instinct for knowing when to lay off a risk, and he possessed the wisdom so necessary in insurance to lay a solid financial foundation for his company in its early years of risk. Imperial Chemicals Insurance Ltd. will stand as a monument to him.

We enjoyed many happy years of friendship on the golf course and on occasional trips with his delightful wife, Agnes, to Lingfield race meetings. Lingfield was his favourite stamping ground, and he was always at his best there. Those days were both enjoyable and unprofitable to both of us!

We shall all miss him. For myself I do not think I shall return to Lingfield, as it would not be the same place without him.

Appointed Managing Director of I.C. Insurance Ltd.

Mr. N. J. Freeman has succeeded Mr. Alexander Hadden (whose death is reported above) as head of I.C.I. Insurance Department and managing director of Imperial Chemicals Insurance Ltd.

Mr. Freeman has been a director of the insurance company since 1950, and was its secretary for three years before that. In 1952 he was elected a vice-president of the Insurance Institute of London.

He joined I.C. Insurance Ltd. from an insurance company in the north of England after war service as a pilot in the R.A.F.V.R., in which he attained the rank of Squadron Leader and was mentioned in despatches.



Mr. N. J. Freeman

Australia may test British Process

A new process, perfected in London during August, is expected to rouse keen interest in Australia. I.C.I.A.N.Z. have received news of it in a letter from Australasian Department in Head Office, dated 20th August:

"Can we interest you in an ashes recovery process? We have been rather impressed during the last few days with the Laker-Lock process, which seems to depend on careful moisture control of a dust-laden surface. This is unlikely to be tried out in Australia until 1955. We cannot, of course, say whether it is suitable for Australian conditions."

An official spokesman of the Australasian Department says: "We have no doubt that I.C.I.A.N.Z. will ask for further details. What Australian would not?"

Record Catch from the Thames

Mr. H. Brown, of Engineering Services Department, Earlsfield, is one of those humane anglers who always return to the water any fish they catch. One Saturday in August, however, he broke his rule and brought away from the Thames between Kingston and Hampton Court the proof of the best fishing story he has been able to tell for years.

It was a 7½ lb. barbel, believed to be the biggest taken from this stretch of water since 1888. Barbel of this size are by no means common in the Thames, being found more normally in the Avon and Kennet.

An interesting feature of Mr. Brown's capture is that he was using a nylon monofil line which had a 6 lb. breaking strain when he purchased it twelve months before. Apart from the strain put on it by the fighting of the fish for twenty-five minutes, it was subjected to a very heavy shock strain when the top two feet of Mr. Brown's rod broke away: when this happened the fish plunged heavily before the line took up the strain again.



Mr. Brown, his 7½ lb. barbel, and his son Rodney, who helped him to land it

The line was checked afterwards by the representative of an angling journal and its strength determined to be 4½ lb.; the catch was therefore a tribute to nylon no less than to Mr. Brown's angling skill.

BILLINGHAM DIVISION

Mr. J. Dixon Smith

Mr. J. Dixon Smith, who has been a member of the Billingham Division board since October 1946, retired recently.

Mr. Smith's I.C.I. career started in 1913 with Brunner, Mond & Co. at Winnington. In June 1920, following a period of service with the Tank Corps during the first world war, he came to Billingham as Chief Accountant with Synthetic Ammonia and Nitrates Ltd. He has always taken a great interest in golf, and this year was elected president of the Tees-side Golf Club. For more than twenty years he acted as vice-president, and was captain of the club on two occasions.

C.A.C.

Dr. E. H. Tripp

The death occurred on 22nd July of Dr. E. H. Tripp, a lifelong friend of agriculture.

The Chairman of C.A.C. writes:

In his quiet, humorous but scientific way Tripp was one of the best-liked people who ever graced the industry.

He was born in 1874 and educated at Merchant Taylors School and then in Marburg, Lausanne and Berlin. He was a Doctor of Philosophy (*multo cum laudi*) with honours in all subjects, his special subjects being chemistry, physics,

mineralogy and philosophy. He was a great linguist and spoke French, German and Spanish fluently and had a good working knowledge of Italian. He was also interested in Esperanto.

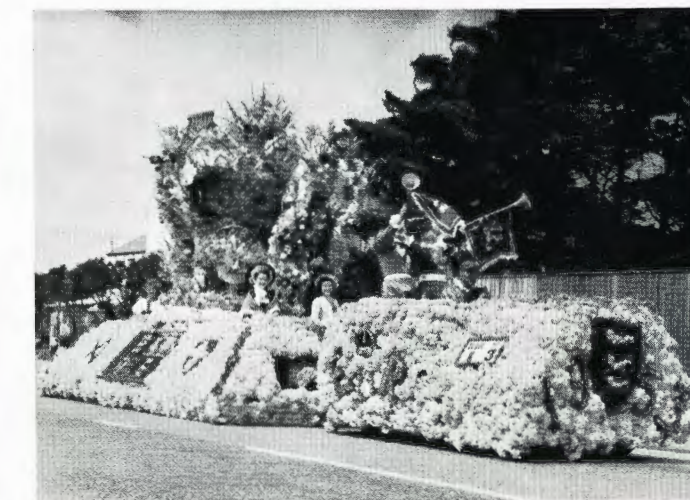
Tripp's main work was probably that of senior chemistry master at Bedford Modern School, a post he held between 1904 and 1916. He prepared himself for this as head of the Chemical Department at the Municipal College in Swansea. From 1917 to 1923 he was joint editor of the Society of Chemical Industry's journal, and thereafter he was a consulting chemist for Organic Fertilizers Ltd. In 1927 he joined Nitram Ltd. (subsequently incorporated into I.C.I.). Here he was chief of the Intelligence Section until 1932, when he was appointed the first secretary and editor of the *Empire Journal of Experimental Agriculture*, an appointment which he retained until his death. In addition to this post, he acted from 1937 until his death as a consultant on agricultural matters to the Central Publicity Department of I.C.I.

Tripp was a man of great learning and of varied interests. He could talk well and amusingly on almost any subject under the sun, and to the end of his life, by infrequent letters, he maintained contact with all his friends. For many years he suffered from a particularly painful form of arthritis, but he never permitted it to interfere with his arrangements. He was a man of great moral and physical courage, and he will be missed for a long time by a wide circle of friends.

Plant Protection wins Jersey Battle

The staff of the regional office of Plant Protection Ltd. in Jersey have won a first prize of £80 in the island's annual battle of flowers. Their entry, a decorated tractor towing a large crown made of gilded baskets of flowers, used thousands of hydrangeas, statice, marigolds, dahlias, asters, gladioli, carnations, gypsophila, sweet peas and bulrushes.

Seated at the four corners of the trailer on which the crown was mounted were girls in the national costumes of England, Scotland, Wales and Northern Ireland. On each side of the float was a large Royal Standard and on the back a Union flag—all made entirely from flowers. The tractor was also covered in flowers, with symbols of royalty and a floral coat of arms on the front. On the back of the tractor stood heralds with banner-decked trumpets.



Plant Protection's prizewinning entry in the Jersey battle of flowers

Since 1st October Plant Protection's Jersey office has come under the control of S.E. Regional Office, Maidstone.

DYESTUFFS DIVISION

Queen's Company Grenadier

Sergeant Whitehead of the Queen's Company, the Grenadier Guards, is once again plain Mr. Allan Whitehead, an assistant in the Rubber Service Laboratory at Hexagon House.

As he exchanged his bearskin for a trilby Mr. Whitehead probably had more regrets than most national service men returning to civilian life. Thanks to his height—6 ft. 4 in.—he was posted to the King's Company of the Grenadiers soon after finishing his training at Pirbright in 1951. Thereafter he took part in all the state occasions at which it is the company's special privilege to officiate.

After King George VI died, Mr. Whitehead, then a guardsman, was in the guard of honour at St. George's Chapel, Windsor, and took a turn of duty in Westminster Hall for the lying-in-state.

The King's Company then became the Queen's Company. In June 1952 Mr. Whitehead took part in the Trooping of the Colour, and shortly afterwards was promoted to lance-corporal. When the battalion was transferred to London he served as a member of the Queen's Guard mounted at St. James's and Buckingham Palace, in the Tower of London guard and the Bank of England picket.



Mr. Allan Whitehead, who became a sergeant of the Queen's Company during his national service

His national service was due to end in January this year. "But," says Mr. Whitehead, "I was persuaded to re-enlist for six months." They were a busy six months. The Queen's Company was already rehearsing for the Coronation when Queen Mary died, and Mr. Whitehead was again in the guard

of honour at Westminster Hall. Then came the presentation of a new Queen's Company Colour by Her Majesty at Windsor, the presentation of new colours to the 1st and 2nd battalions of the Grenadier Guards at Buckingham Palace, and guard-mounting on alternate days from Horse Guards Parade.

Finally there was the Coronation itself. Mr. Whitehead, by now a lance-sergeant, was one of the 53 officers and men of the Queen's Company to be on duty in Westminster Abbey annexe. With three other lance-sergeants he guarded the regalia table from 8.15 a.m. to 3.15 p.m.; it was a long turn of duty, he admits, but there was so much to see that the time passed quickly.

"I shall miss all the excitement of the last couple of years," he says, "but at the same time I shall be glad to get back to work and a normal life again." At 21 years of age Mr. Whitehead certainly has more to look back on than most of us will at 81.

Any Claimants for a Week's Pay?

If the owner of pay check No. 340 will apply to the Wages Department at Blackley Works he will probably hear of something to his advantage. The pay check, in the form of a brass disc, was recently found on the ground in the car park. But some trouble is anticipated in finding the owner, for he may have dropped it more than twenty years ago—and presumably he lost his wages for that week.

This type of pay check was introduced about 37 years ago and continued in use for some years after Levinstein Ltd. (misspelt on the disc) of Blackley and Read Holliday Ltd. amalgamated to form British Dyestuffs Corporation Ltd.

The checks were issued to employees on the day before pay day and acted as a warranty for claiming wages at one of the pay stations located in different parts of the factory. At one time wages were paid in small circular tins with a permanently fixed half-lid; the difficulty of getting the money out was only equalled by the difficulty the wages clerks had in getting the money in.

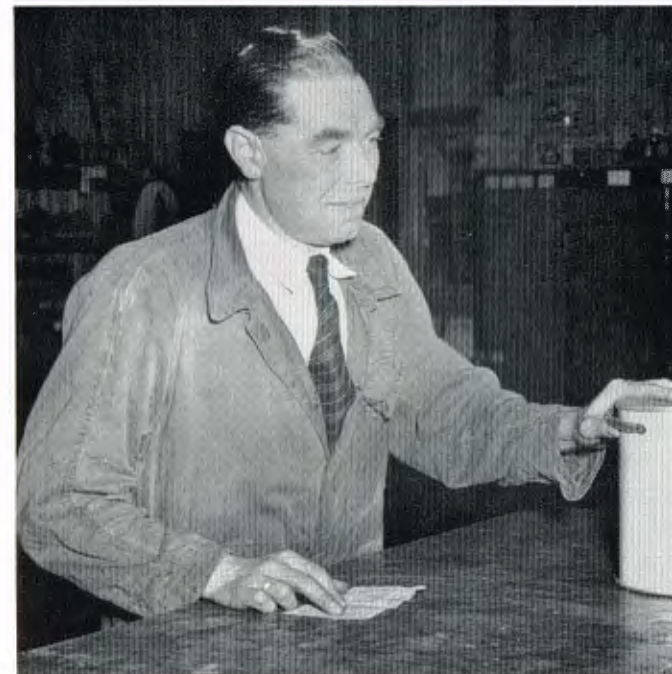


GENERAL CHEMICALS DIVISION

Widnes' Youngest Mayor

When he doffs his overalls at the end of a day's work and leaves the stores department at Gaskell-Marsh Works, Mr. Frank Traynor can seldom look forward to an evening's relaxation at home. His spare time is fully occupied with another job—that of being Mayor of Widnes.

Mr. Traynor is the youngest mayor the town has ever had. He has already been a member of the Town Council since 1945, and has served on the Library, Housing, Bridge and Omnibus, Secondary Education, General Purposes and Finance Committees. He is also an active trade unionist and a prominent member of various bodies concerned with education. In 1929 he became one of the first members of the Widnes Sea Scouts, and although they no longer exist he has



The Mayor of Widnes, Mr. Frank Traynor, at work in the Gaskell-Marsh stores

retained his interest in scouting and is vice-president of the Cheshire Boy Scouts Committee. He is a founder member of the recently formed Widnes Historical Society.

Mr. Traynor has been with I.C.I. since 1929. His father, Mr. John Traynor, was maintenance foreman at Marsh Works until his death in 1941.

Australian Visitor wins Cycling Trophy

Mr. Jim Nevin, of Chief Engineer's Department, won an outstanding cycling victory at the Manchester Wheelers'



Winner of the Muratti cycling cup: Mr. Jim Nevin

meeting at Fallowfield. He completed the ten-mile course for the Muratti Gold Cup in 20 seconds less than the previous record time, and thus secured the cup (valued at £450) and a new record. Although the record may remain his for some time, he will have to surrender the cup to its next winner.

Mr. Nevin is an Australian from I.C.I.A.N.Z. and is in this country for two years' experience in heavy chemical engineering. Recently he won the Tour of Wicklow race in Ireland and came third in the Hercules Cup race. He was in the Australian Olympic cycling team in 1952.

LEATHERCLOTH DIVISION

Retirement of Mr. G. S. Jones

Mr. G. S. Jones, a Division director, retired on 31st August after more than 33 years' service with the Company and its predecessors.

Mr. Jones joined Synthetic Ammonia and Nitrates Ltd. in 1920 as an engineer and transferred to I.C.I. Technical Department in 1927. In 1934 he joined Metals Division and became Division Chief Engineer in 1940. He was appointed to the Leathercloth Division board in 1946.

LIME DIVISION

Chief Engineer appointed to Board

Mr. G. W. Talbot has been appointed managing director of the Division, while retaining his post of chief engineer.

Mr. Talbot joined the Lime Division some 28 years ago, when it was known as the Buxton Lime Firms Co. Ltd. In November 1934 he was appointed Chief Engineer, and became a member of the Division board in 1945.

During the whole of this time he has been very actively concerned with the modernisation of the various plants and equipment throughout the Division, including the mechanisation of Tunstead Quarry, which, as is well known, is one of the most efficient and up-to-date units of its type in the world. In the course of his investigations he has journeyed round the world, spending several months in Australia giving technical advice on the mechanisation of the Penrice Quarry of the Alkali Division.



Mr. G. W. Talbot

Gardeners succeed at Buxton Show

Fifteen keen gardeners of Lime Division distinguished themselves at the Buxton horticultural show held in August. They contributed 300 of the 1000 entries, and each of them won at least one prize.

Mr. J. Potter (Engineering Department) won the Covill Rose Bowl awarded to the competitor from Lime Division securing the highest number of points in the show. The Duke of Devonshire's silver perpetual challenge trophy for the



The Duke of Devonshire, who is Mayor of Buxton, hands the Covill Rose Bowl to Mr. J. Potter at the Buxton horticultural show

competitor obtaining most points in the local classes went to Mr. S. Green of Cowdale Works.

Mr. Potter and Mr. Green collected more than fifty prizes between them. In all, the Lime Division exhibitors won 138 prizes.

METALS DIVISION

Holiday Heroes

In the later months of summer stories of gallant rescues at the seaside or on mountains become almost commonplace. Even so, it must be rare for one I.C.I. Division to produce two such stories inside a month.

At a recent ceremony at Swansea Guildhall Mr. D. J. Jones received a Royal Humane Society testimonial from the Mayor of Swansea, Councillor D. J. Fisher. Mr. Jones, foreman of the Forge Department at Landore Works, has spent all his working life with the Company. Last July he rescued a young girl who got into difficulties bathing near the West Pier,



Mr. D. J. Jones receives a Royal Humane Society testimonial from the Mayor of Swansea

Swansea Bay; the citation accompanying the testimonial stated that but for his help she would undoubtedly have drowned.

Hard on the heels of this report came news of a double rescue attempt by Dr. S. W. Mills, works doctor at the Dundee factory of Fyffe & Co. Ltd., and his wife. While on holiday at Seascale, Cumberland, the doctor and his wife, swimming off the beach, saw that two schoolboys were in difficulties. Mrs. Mills brought in one of the boys, who recovered after artificial respiration, while her husband swam further out to reach the other. This boy, unfortunately, died after a two-hour fight to revive him.

Top Dogs in Birmingham Cricket

The Allen Everitt first XI have just carried off, for the fourth successive year, the championship of the Birmingham and District Works Amateur Cricket Association, Senior Division. The final ended amid traditional suspense with "two to get and the last man in." But the last man—otherwise known as Sam Matthews—made no mistake, and tension relaxed as he despatched his third ball to the boundary.

The Smethwick team, not satisfied with a mere league championship, also trounced their opposing finalists with a five-wicket victory in the subsidiary Senior Cup competition.

NOBEL DIVISION

Bowling Expert

Mr. W. Bennie (Westquarter Factory) has become the bowling champion of champions for East Stirlingshire by winning the singles competition in which all the club champions of his district were entered.



Champion bowler Mr. W. Bennie

Mr. Bennie has been bowling for seventeen years, and during the last eight years he has won the championship of his club, the Polmont Bowling Club, three times.

Lady Cricketers at Tuckingmill

Even if the ladies at Bickford Smith Factory, Tuckingmill, are not very good cricketers, at least they are good sports. This was the verdict of the men who met a ladies' XI in the epic match for the Coronation Cup.

The men were sporting, too. They are still a little vague as to the exact number of players in the opposing side, but the figures quoted most often are 16 or 17. They bowled under-arm, they batted and fielded left-handed; they gave the ladies every chance, but still they won by six wickets.

The ladies batted first. Miss Nairn, one of the opening pair, was soon out for a duck. Miss Sylvia Bray, the captain, was the mainstay of the innings, and scored 15 before being caught. Three quick ducks, three ones and a two—and then it was all over. The ladies were out for 27.

Faced with this total, the men soon set about the ladies' bowling, top scorer being Mr. P. L. Rowe, with 17. A feature of the men's innings was the running between the wickets of Mr. Leonard Yeoman, who ran a sharp single for each ball, whether his bat connected with it or not. With the men's score at 52 for 8, the teams called it a day.

Miss Sylvia Bray, the ladies' captain, is actually used to more serious cricket than this. Last year she was one of six Cornwall players chosen to play in a match at Camborne which included sixteen England cricketers brought down for the occasion by the English captain, Miss Molly Hide.

Miss Bray also plays hockey for Cornwall and is vice-captain of the Camborne Blues hockey club.

SALT DIVISION

Geologists go down the Mine

Few visitors to the salt mine at Winsford have such a profound knowledge of mining as the party which was entertained by Salt Division in September. Many of them carried geological chipping hammers which they used to hack out small pieces of rock salt in order to examine the structure more closely. Most of the visitors were, in fact, professional scientists with a special interest in geology, who had been attending the annual conference of the British Association for the Advancement of Science at Liverpool.

Mr. D. D. Stanier, who until his retirement earlier this year was manager of Brine and Water Works of Alkali Division, welcomed the visitors on their arrival and gave them a short talk on the Cheshire saltfield.

After touring the mine the party was entertained to lunch in the West Area canteen by Mr. T. R. Scott and other Salt Division officials. Dr. F. M. Trotter, head of the Geological Survey Department, Manchester, called upon the principal guest, Sir Edward Bullard, Director of the National Physical Laboratory, to express the thanks of the visitors to their hosts. Also present among the guests were Professor L. R. Moore of Sheffield University and Dr. T. Robertson, assistant director of the Geological Survey.

Speaks to the World from his Bedroom

Although many people have a radio in their bedroom, few have a bed in their radio room. One of the few is Mr. Gordon Heath, instrument mechanic at Stoke Works, who is such an enthusiastic radio "ham" that he regards the bed in his roomful of radio equipment as a necessary nuisance.

Mr. Heath's bedroom is known officially as British Amateur Wireless Station G3ATQ. His transmitter, which he made himself, has an efficiency comparable to that of expensive commercial sets, and on the 10, 20, 40 and 60 metre bands he

talks to fellow "hams" all over the world. He counts as next-door neighbours the fellow amateurs in distant European countries with whom he "drops in to breakfast" on Saturdays and Sundays.

After making a new contact, "hams" confirm it by exchanging QSL cards. Mr. Heath has hundreds, and behind many of them lie stories of great interest. One of his most treasured cards bears the name of Andrew B. Young, who lives on Pitcairn Island and is a great-great-great-grandson of the Fletcher Christian who originally settled on the island after the *Bounty* mutiny.

Before the Russian "hams" went off the air in 1949 Mr. Heath used to hold what he calls "rubber stamp" conversations with them. These were confirmed in the normal way by QSL cards. One bears a photograph of the "inventor of radio"—not Marconi, but a bearded man named H. S. Popov.

One of Mr. Heath's regular contacts was a man on board ship, who would give his position in the oceans of the world but never his name. It was only when the story of the *Flying Enterprise* hit the headlines that Mr. Heath learned that the name of his contact was Captain Kurt Carlsen.

Mr. Heath's immediate ambition is to qualify for the certificate given to international "hams" who have a QSL card from each of the forty-eight States in the U.S.A. That certificate is now almost in sight.

I.C.I.A.N.Z.

Resignation of Chairman

The board of I.C.I.A.N.Z. announced recently the resignation of their chairman, Dr. F. T. Meehan, on account of ill health. Dr. Meehan will continue as a member of the board and as technical consultant. His place as chairman has been taken by Mr. K. G. Begg.

Dr. Meehan joined the General Chemicals Division of I.C.I. in 1930. He was a plant manager at Castner-Kellner Works until 1934, when he was transferred to the development department in Liverpool. From 1937 until 1941 he was in Finland as manager of Finnish Chemicals O.Y.; he supervised the construction of the works (which manufactured chlorine and caustic soda) and then took over responsibility for production. Shortly after he had returned to England, via Stockholm, he was seconded to I.C.I.A.N.Z.

Dr. Meehan's first job in Australia was to supervise the building of the Botany factory. He was appointed to the board in 1946, later being made joint managing director and finally chairman.



Mr. G. Heath



Dr. F. T. Meehan

I.C.I. (CHILE)

Silver Jubilee

This year I.C.I. in Chile celebrated its 25th anniversary. *Campaña Imperial de Industrias Químicas de Chile S.A. Comercial e Industrial* (to give the Company its full name) was founded in Santiago on 1st June, 1928, on the basis of a long-established agency business.



Mr. L. I. Crawford is congratulated on his 25 years as president of I.C.I. in Chile by Sr. Vasquez

The company has undergone many changes since then, but Mr. Leslie Ingram Crawford, who was the company's first president, is still president now. In acknowledgment of what they termed "his kindness and understanding of human nature" the staff made a presentation to him.

The presentation was made on their behalf by Sr. Fernando Vasquez, who can also boast 25 years' service.

I.C.(P)

Retirement of Dr. H. Hepworth

Dr. Harry Hepworth, O.B.E., D.Sc., F.R.I.C., managing director of I.C.(P), retired from the Company's service on 30th September. He first worked at Ardeer, where he was founder secretary of the Ardeer Chemical Club, and was transferred to the Technical Department in London in 1928 to look after heavy organic chemicals.



Dr. H. Hepworth

In 1934 he became a delegate director of British Dyestuffs Corporation Ltd. (now I.C.I. Dyestuffs Division), and in 1936 the Company started a project on pharmaceuticals with which Dr. Hepworth has been concerned ever since. The war accelerated progress, and in 1942 Imperial Chemical (Pharmaceuticals) Ltd. was formed, of which he was a delegate director, and in the last few years managing delegate director.

In 1945 he led the British Mission on Pharmaceuticals to Germany and in 1950 was made an O.B.E. on the recommendation of the Ministry of Health.

For about twenty-five years he has represented I.C.I. on the Group B Committee of the Association of British Chemical Manufacturers and for a few years was chairman of the group.

The name of Dr. Hepworth will always be associated with the formative years of I.C.(P), for his was the guiding hand in its creation and early development.

During the years of a long and busy career he has yet found time for other activities. The cast of an excellent Lough Corrib trout, familiar to many visitors to the managing director's office at Fulshaw Hall, is evidence of interest in a pastime which has claimed many enjoyable days on Loch Leven and elsewhere. In recent years Dr. Hepworth has become increasingly absorbed in archaeology, especially in the Near and Middle East, where he has travelled widely. His journeys abroad on the Company's business have taken him to many countries, and altogether he has made more than fifteen visits to the United States and Canada.

At Ardeer Dr. Hepworth worked in association with Mr. John Rogers, formerly Chairman of I.C.I., and also with Dr. Jenkins, the present chairman of the Nobel Division, and Dr. Armit, chairman of Wilton Council. His habit of early rising and his punctuality at his desk are a legacy of those days at Ardeer when it was necessary to be on duty on the nitro-glycerine hill at six o'clock in the morning.

After nearly 40 years' varied and valued service with I.C.I. Dr. Hepworth will be greatly missed, not only at Fulshaw Hall but in many of the Company's offices at home and abroad, where all who knew him and worked with him will wish him well in the future.

Drugs for Earthquake Islands

Drugs to the value of £500 were given by I.C.(P) to the authorities in charge of relief work in the devastated Ionian Islands, where many hundreds of people were killed and injured in the August earthquakes. The consignment—mostly 'Sulphamezathine' and penicillin—was handed over by Mr. Kanaroglou on behalf of the Company.

* * *

OUR NEXT ISSUE

Gordon Cook, the well-known writer of popular science, leads our November issue with an article of unusual interest in which he describes the underwater research of Paints Division on the barnacle. Barnacles are a serious problem to the shipowner, who has to dry-dock his ships more often than normal maintenance requires in order to scrape off barnacle fouling. If a paint could be devised to prevent barnacle fouling successfully, there would be less time and earning power lost in dry dock by the Merchant Navy.

Our colour feature strikes a domestic note. It deals in general terms with wallpapers—their cost, their patterns and their application. Should I use wallpaper, paint or distemper? says the housewife. If wallpaper, what patterns and colour? Well, this article attempts to give an answer.

J. R. Ross of the Marston Excelsior factory in Metals Division writes next about the champion Scotties he has bred. Lastly, Mr. F. S. Binnie, a director of I.C.I. (India), contributes a delightfully nostalgic piece, "Times have Changed."

TEN MINUTES TO GO

By Henry Maxwell

Illustrated by Martin Aitchison

"DON'T go too far, monsieur," said the sleeping-car attendant; "you have only about ten minutes now."

The Englishman stood on the steps of one of the blue sleeping cars of the Rome Express. He had boarded it at Calais, and now, in Paris, the tedious circle around the city from the Gare du Nord to the Gare de Lyon completed, the vehicle was being coupled up to the main part of the train, ready to depart at the tick of 19.50 hours for Dijon and the south. Dinner would be served in the wagon-restaurant as soon as the train left. The Englishman desired to stretch his legs.

"I shan't go far. Just beyond the barrier, to buy a paper from the bookstall."

"Bien, monsieur."

Beyond the platform end, in the circulating hall, was a scene familiar to large railway stations the world over. Travellers of all distinctions. Young and old. Poor and less poor. Some noisy young people, equipped with skis and dressed all ready for winter sports, made a distinctive group as they called to one another and indulged in mild horseplay to work off their high spirits.

The Englishman made his way to the bookstall, a conspicuous figure in his dark Savile Row overcoat, his black Foreign Office felt hat, and his tightly rolled "Chamberlain" or umbrella. "Un Anglais, hein!"

He bought the day's *Figaro* and *Paris-Soir*, browsed perfunctorily among the paper-backed novels and, finding nothing, turned to go.

It was at this moment that there occurred quite a commotion. Some of the noisy youths who had been gathering by the platform for Chamonix and the mountain resorts, with their shiny-cheeked girl-friends, came running pell-mell across the hall, led by a sturdy young man with a red face. They ran much too fast to look where they were going and people began shouting after them and looking angry. The faces of the young men as they ran had ceased to be smiling, and after them, rising above the inarticulate sounds of protest which their helter-skelter passage occasioned, came a more compelling cry: "Stop thief! Robbers! Stop thief!" The shouts seemed to run with them, so quickly were they caught up and speeded on, and with every moment more people joined in the chase, porters, onlookers, passengers.

As the cavalcade swept out of the hall into the station exit, it came into collision with an old man who was just entering, a suitcase in either hand. He was knocked over and fell on his back and his hat came off and rolled away from him. No one had time to stop; in a moment the whole chase had passed hot-foot into the darkness outside and was lost to view. The old man began to pick himself up. He was nearly beside himself with indignation. "Look where you're going, imbeciles!" he shouted vainly after the retreating shadows. "Justice! I must have compensation for this!"

Nobody paid him any attention. They had better things to think about, for now that the pursuit had run its headlong course out of the station, it became possible to distinguish who had been the victim of the assault. An old working woman right in the middle of the main hall was fairly lifting the roof with her cries. "Arrest him! Oh my God, arrest him, can't you? He's stolen my bag, my all! He's stolen it! Arrest him! Oh my God, he's stolen my all, my bag!"

She was dressed all in black, thick black woollen stockings, a coarse cloth skirt, a blouse, a black woollen shawl over her head, and she came lumbering along on her bandy legs and gesticulating with her arms vaguely in the direction which the flight had taken. When the distance became too great for her to identify the running figures she stopped and began to stump around in diminishing circles, raving and cursing. "Stop him, can't you? Don't just stand there, my God! He's taken my bag. My all! Can't you understand? Arrest him! Robber! Assassin!"

An audience gathered to admire the spectacle of the old woman's hysterics. They formed a circle for her, four or five deep, and inside it she pounded round, her broad peasant's face aflame with passion, yelling more and more hoarsely, "He's taken my bag! My all! My all is in it! Arrest him, my God! Arrest him!" Her circles grew smaller and smaller. Suddenly she sank wailing to the ground and began to pound with her fists and to raise hideous and doleful cries. There was a murmur of admiration from the onlookers. They felt that she was dramatising the situation most adequately. Several of the men nodded their heads with approbation.

It was at this juncture that the old man who had been knocked down came up to them, with his suitcases. He

set down his luggage and tried to make a way through the crowd with his hands.

"Let me pass. It is easy to see what has happened. This old lady has been knocked over the same as I. Disgraceful! Why are there no police here? We are both victims, let me through to her."

There was no disposition on the part of the crowd to make way for the old man. The two men whom he had tried to prise apart resisted, and braced their shoulders against one another. "She has not been knocked down, she has been robbed."

The old man tried again a few paces down, this time among some women.

"Let me pass. This lady has been knocked down and so have I. We will redress our wrongs together."

The women made no movement to allow him to get through.

"Let me pass through, if you please," continued the old man. "It is essential. I too have been knocked down. This lady may have been injured. Seriously. My wife's cousin is a chemist. I may be able to render valuable assistance."

All at once there was a stir. An electric impulse seemed to shoot through the crowd of onlookers. The pursuers were returning, bringing with them one of the young men in winter-sports outfit. He was pinioned by the arms by two porters in blue smocks, and a watchful escort saw to it that he made no sudden move to get away.

"Courage, Maman, it appears they have your man," declared a seedy-looking man in a raincoat. Instantly the old woman was galvanised into life. She struggled to her feet, and, as the crowd opened to allow her to confront the approaching company, she came scrabbling forward on her ungainly legs, shouting as loudly as ever, "He's stolen my bag! Where is it, my bag? He's stolen it, the robber!" As she came up to the young man, still gripped by the arms by his captors, she dealt him a slap on the side of the face.

The young man's face went slowly deep red. He was hatless and his dark hair was dishevelled. It was impossible to say whether he was the same young man who had led the stampede out of the station. He was sturdily built and his face was red even before the old woman had slapped it, but he possessed no readily identifiable features.

"Is this the thief?" queried the larger of the two porters. "Do you recognise him?" As he spoke he gave the young man a shake.

The old woman tried to slap him again. "My bag!" she screamed. "He stole it! Assassin! Imprison him! Make him give it to me!"

"Let me go!" said the young man. "I have not taken this old woman's bag. I was trying to catch the thief for her like everyone else. I was standing just near her and



she screamed at me and I started running with them. Let me go."

"There," cried one of the women onlookers, "he admits he was standing just near her. Of course he is the thief. Who else?"

The shorter of the two porters released his hold of the young man's arm.

"There must be a little precision in all of this," he affirmed. "Can you say, madam, definitely, whether you recognise this boy or not?"

"He stole my bag! My all! Beat him! Make him give it me back! My bag, my God! My all!"

"Of what use is that?" snarled the porter. "Typical woman's chatter!"

There was a murmur of reprobation from those around. The larger of the two porters disengaged himself from the young man and turned towards his colleague with sarcasm.

"Permit one to observe that some gentlemen have had dust enough thrown in their eyes by less chatter than that from a woman."

The smaller porter took a step backwards and regarded the speaker with fury. He made to say something, then spat with execration upon the floor.

The larger man pursued his advantage. "Anyone can be contemptuous of women when they have had the horns put upon them." "Name of God!" cried the smaller porter and spat again.

"Give me my bag!" shrieked the old woman suddenly, and she launched herself again at the young man. The young man reached out at her, as she approached, and returned the slap which she had given him. Instantly there was violent commotion in the crowd.

"Slap a woman!" "Steady now!" "Give it him hot!" "Perhaps he's innocent."

"Silence all!" roared the larger porter. "I'll take charge of this."

"By what right?" demanded a small shrivelled-up little man, who had been gradually edging forward.

"By what right?" demanded the porter, incredulous. "Who wants to ask me that?"

"I do, for one," asserted the shrivelled-up little man. "These proceedings begin to savour of the Occupation. Are we in the hands of the so-called Resistance, that we should undergo these arbitrary arrests?"

He could get no further. A positive storm of argument and counter-argument had been let loose by his words, in

which the only persons not immediately engaged were the old lady, the young man and the elderly gentleman who had been knocked down.

"Dirty little type of militiaman!" shouted the furious porter.

"Communist!"

"Ah! Ah!" The hubbub was frightful.

In the midst of it, the Englishman, now more than ever conspicuous, glanced up at the station clock. The hands pointed to 19.50. A spasm transfixed his impassive face. "Good heavens, the train!" He broke from the crowd and started running for the platform turnstile.

As he began to run, a man on the outskirts of the spectators noticed him, and his mind worked fast.

"Stop thief!" he shouted wildly. "Stop thief, there he goes!"

In a second the hunt was on. The Englishman, his eye riveted on the platform, dodged and dived among the passengers and idlers standing between him and his goal. After him sprinted his pursuers. The fastest, the larger of the two porters, gained upon him momentarily, his hand already held out to grab his shoulder. The distance to the turnstile was short, however, and the Englishman had a start.

"Stop him!" shouted the porter to the ticket inspector. "Stop thief! Stop him, you blockhead!"

The two arrived at the turnstile together.

"What is all this?" demanded the irate ticket inspector. "What passes itself here?"

The Englishman held out his fluttering booklet of tickets; his railway ticket, sleeping-car supplement, dinner voucher and so on. A few yards away from him the rear coach of the Rome Express, gleaming in blue and gold, was beginning to move out of the station.

In despair he produced from his pocket a five hundred franc note and pushed it at the porter.

"You say this man is a thief?" demanded the ticket inspector with ghastly deliberation. "Why do you say this man is a thief?"

"I say nothing of the kind!" shouted the porter, his huge fingers closing on the note. "I say he is a first-class passenger who will miss his train to Rome if incompetent officials like yourself obstruct him one second longer." So saying he pushed the Englishman violently past the inspector. "Run, monsieur—hurry!"

The Englishman ran. He caught hold of the handrail of the sleeping car, and found himself pulled up into the vestibule by the strong arm of the conductor. "I told monsieur he should not go too far."

The Englishman nodded his head guiltily and panted. He gazed back along the platform to the receding barrier.

The large porter and the ticket inspector were waving their arms at each other in furious altercation.



Mackerel curing at Beylerbey, Turkey

Photo by K. Rodwell (I.C.I. Film Unit)